



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/937,460	12/28/2001	Pieter Tjerk Koopman	3135-011614	9480
28289	7590	10/30/2008	EXAMINER	
THE WEBB LAW FIRM, P.C.			AN, SHAWN S	
700 KOPPERS BUILDING			ART UNIT	PAPER NUMBER
436 SEVENTH AVENUE				
PITTSBURGH, PA 15219			2621	
			MAIL DATE	DELIVERY MODE
			10/30/2008	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	09/937,460	KOOPMAN, PIETER TJERK
	Examiner SHAWN AN	Art Unit 2621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If no period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(o).

#### Status

1) Responsive to communication(s) filed on 09 January 2008.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 22,24,26-30,32-34,36,40 and 42 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_ is/are allowed.

6) Claim(s) 22,24,26-30,32-34,36,40 and 42 is/are rejected.

7) Claim(s) \_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some \* c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO/GS/08)  
Paper No(s)/Mail Date \_\_\_\_

4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_

5) Notice of Informal Patent Application

6) Other: \_\_\_\_

**DETAILED ACTION**

***Reopen Prosecution***

1. In view of the Pre-appeal brief filed on 1/09/08, and the pre-appeal conference with the supervisor, Mehrdad Dastouri, and the primary Examiner, Shawn An, PROSECUTION IS HEREBY REOPENED. The Office action is set forth below.

To avoid abandonment of the application, Appellant must exercise one of the following two options:

- (1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or
- (2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then Appellant must pay the difference between the increased fees and the amount previously paid.

***Response to Arguments***

2. Applicant's arguments with respect to pre-appealed claims have been carefully considered, and after a thoughtful review, the last Office action has been hereby vacated. However, Applicant's arguments with respect to still pending appealed claims are moot in view of the following new ground(s) of rejection.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 22, 24, 26-29, 33, 36, 40, and 42 are rejected under 35 U.S.C. 102(b) as being anticipated by Fujiyama et al (5,190,632).

**Regarding claims 22, 24, 27, and 36,** Fujiyama et al discloses a device/method for selecting and recording an image of an irradiated or emissive object comprising complexes of DNA, RNA, or protein, the improvement comprising: an immovable (mounted to the electrophoresis unit; Fig. 1, 1) object holder (Figs. 1-2, 5) for positioning the object (a sample of DNA fragments; the gel member) in a stationary position (col. 9, lines 13-48); and

at least one mirror (Figs. 2 and 4, 22) is rotatable around a single rotation axis for purpose of reflecting a chosen part of the image of the object to a viewing area, and a camera (Fig. 2, 24), wherein the at least one mirror is displaceable for selecting a part of the image from the reflected image of the object while holding the object in the stationary position (col. 12, lines 34-68; col. 13, lines 1-15).

**Regarding claims 26 and 40,** Fujiyama et al discloses a radiation source (Fig. 2, 21) for irradiating the object positioned by the object holder (5).

**Regarding claims 28 and 42,** Fujiyama et al discloses the radiation source (Fig. 2, 21) being disposed on the side of the object remote from the at least one mirror (22).

**Regarding claims 29 and 33,** Fujiyama et al discloses a drive means (Fig. 2, 30) for rotating the at least one mirror, which has an elongate form (22).

#### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 32 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujiyama et al (5,190,632).

**Regarding claim 32,** Fujiyama et al discloses the device being provided with an at least sealed housing (Fig. 1).

Furthermore, the Examiner takes official notice that a housing such as used in Fujiyama et al's device, or the substantially the similar electrical device usually is completely sealed (radiation sealed as well) for the purpose of protection and prevention so at least the external irradiation by a radiation source does not interfere with the internal radiation source in the device.

Therefore, it would have been obvious to a person of skill in the art to recognize that Fujiyama et al's device being provided with an at least substantially radiation sealed housing for the purpose of protection and prevention so at least the external irradiation by a radiation source does not interfere with the internal radiation source in the device.

**Regarding claim 34,** it is considered an obvious feature to make Fujiyama et al's at least one rotatable mirror, rotatable axis, and a drive means for rotation of the mirror to be integral with the camera, so that the selected part of the image from the reflected image of the object is totally aligned with the rotatable mirror, rotatable axis, and the light received by the light collector (23)(via rotatable mirror, rotatable axis, and the object) is converted into electric signals by the camera, thereby providing a smooth operation by having the at least one rotatable mirror, rotatable axis, and a drive means for rotation of the mirror to be integral with the camera.

7. Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fujiyama et al (5,190,632) in view of Liu et al (5,998,796).

**Regarding claim 30,** Fujiyama et al does not specifically disclose drive means for displacing the camera.

However, it is well known in the image processing art for a camera to rotate in a desired angle for an effective way of taking/capturing/sensing an image.

Furthermore, Liu et al teaches a detector system for performing sample analysis such as DNA sequencing/fingerprinting (col. 1, lines 9-16) comprising an example of camera displacement/rotation for correcting such as any skew among the received pixels in the sensed image (col. 4, lines 40-49).

Moreover, a drive means for displacing the camera is considered an inherent feature, because the camera can't displace/move by itself.

Therefore, it would have been considered obvious to a person of skill in the art employing a device/method for selecting and recording an image of an irradiated or emissive object as taught by Fujiyama et al to incorporate the concept of camera displacement as taught by Liu et al so that Fujiyama et al's camera can be displaced for correcting such as any skew among the received pixels in the sensed image, thereby effectively taking/capturing/sensing an image.

### ***Conclusion***

8. The prior art made of record is considered pertinent to Applicant's disclosure.
  - A. Fujii (5,100,529), Fluorescence detection type gel electrophoresis apparatus.
9. Applicant's amendment (as filed on 5/21/07) still necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the

statutory period for reply expire later than SIX MONTHS from the date of this final action.

**10.** Any inquiry concerning this communication or earlier communications from the Examiner should be directed to *Shawn An* whose telephone number is 571-272-7324.

**11.** The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300

**12.** Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/SHAWN AN/

Primary Examiner, Art Unit 2621

10/26/08

Application/Control Number: 09/937,460  
Art Unit: 2621

Page 7